

Test Yourself Chapter 9 Displaying single data sets Name: _____

All Multiple Choice

1 **D**

Score	Frequency
0	3
1	5
2	
3	9
4	4

$$\Sigma f = 30$$

The missing number in the frequency table above is:

- A 2
- B 3
- C 7
- D 9

Questions **2** to **4** refer to the frequency table below.

Class	???	Frequency
1–10		5
11–20		6
21–30		14
31–40		17
41–50		6

2 The class size for the frequency table is: **C**

- A 1
- B 5
- C 10
- D 50

3 The heading of the column marked ??? **D** should be:

- A score
- B data
- C cumulative frequency
- D class centre.

4 The first entry in the ??? column (for class 1–10) is: **D**

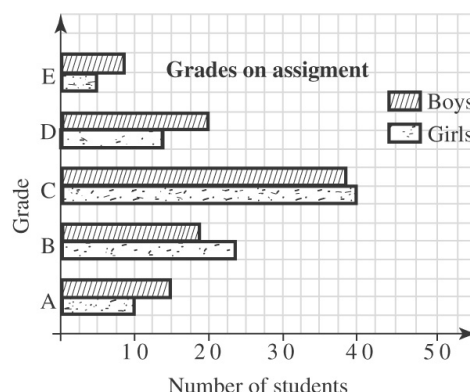
- A 1
- B 4.5
- C 5
- D 5.5

5 Which of the following data would be best shown on a radar chart? **A**

- A The average monthly rainfall in a city.
- B The average monthly earning of people in different age groups.
- C The number of traffic accidents at blackspots across the city.
- D The number of games won by a number of soccer teams.

Questions **6** and **7** refer to the bar graph drawn below

The graph below shows the grades A–E achieved by students on an assignment.



6 How many of the students managed to achieved an A grade? **D**

- A 10
- B 15
- C 20
- D 25

- 7 Which grades were achieved more by boys than by girls? **A**
- A A, D and E
B B and C
C A and B
D C, D and E

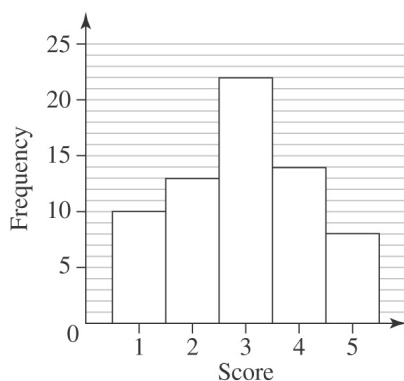
- 8 This frequency distribution table shows the heights in centimetres of prospective basketball players. **A**

Height (cm)	Frequency	Cumulative frequency
160–164	2	
165–169	3	
170–174	5	
175–179	4	
180–184	6	

The values in the cumulative frequency column (from top to bottom) are:

- A 2, 5, 10, 14, 20
B 2, 3, 5, 4, 6
C 2, 3, 10, 14, 20
D 6, 4, 5, 3, 2

Questions 9 and 10 refer to the frequency histogram drawn below.



- 9 The total number of scores in the data set is: **D**
- A 5
B 25
C 30
D 67

- 10 Which of the following frequency tables is represented by the histogram? **C**
- A

Score	Frequency
1	1
2	2
3	3
4	4
5	5

B

Score	Frequency
10	1
13	2
22	3
14	4
8	5

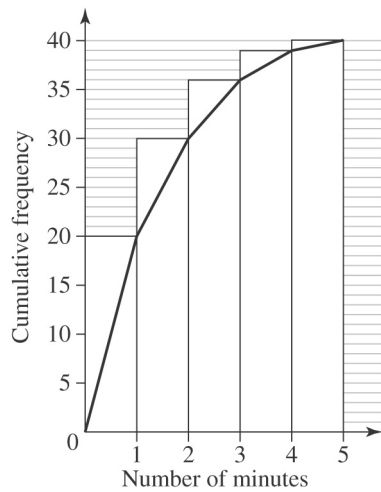
C

Score	Frequency
1	10
2	13
3	22
4	14
5	8

D

Score	Frequency
10	10
13	13
22	22
14	14
8	8

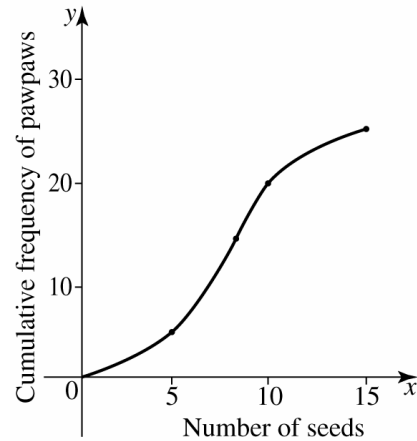
Questions 11 and 12 refer to the cumulative frequency histogram and polygon drawn below.



The graph shows the number of minutes after the bell that students took to arrive for roll call.

- 11 How many students arrived at roll call in less than 3 minutes after the bell? D
- A 2
B 10
C 20
D 30
- 12 How many students took longer than 3 minutes to arrive for roll call? C
- A 1
B 3
C 4
D 36

- 13 The cumulative frequency graph below shows the number of seeds in a sample of pawpaw fruit being investigated during research by the agricultural department. D



How many pawpaws had 10 seeds or fewer?

- A 5
B 10
C 15
D 20
- 14 For the data set: B
28, 9, 17, 38, 45, 62, 91, 20.
The range is equal to:
A 9 to 91
B 82
C 18.5 to 53.5
D 35
- 15 Consider the following lengths (to the nearest centimetre) of 10 trout caught in the Eildon Lake in Victoria: A
12, 18, 14, 20, 16, 22, 15, 25, 15, 28.
The interquartile range of the lengths of the trout is:
A 7
B 10
C 15
D 22

- 16** The data below shows the number of points scored in 24 Rugby League matches.

Key $3 \mid 6 = 36$

Stem | Leaf

1 | 0 4 6 6

2 | 0 0 2 2 4 5 6 6 6 8

3 | 2 2 4 8 8

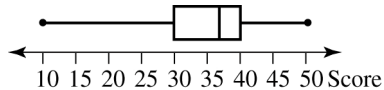
4 | 0 0 2 8

5 | 4

The interquartile range of the data is:

- A 17
- B 24
- C 40
- D 44

Use the box-and-whisker plot below to answer questions **17** to **20**.



- 17** The median of the data set is:

- A 7
- B 10
- C 37
- D 40

C

- 18** The range of the data set is:

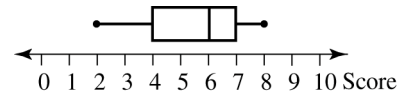
- A 7
- B 10
- C 37
- D 40

D

- 19** The interquartile range of the data set is: **B**

- A 7
- B 10
- C 37
- D 40

- 20** Consider the box-and-whisker plot drawn below. **B**



Which of the following statements is *not* correct?

- A The range is 6.
- B The interquartile range is 6.
- C The median is 6.
- D The interquartile range is 3.